

Reliant Energy New Jersey Holding, LLC Comments to NJDEP's
Workgroup Recommendations and Other Potential Control Measures
Stationary Combustion Sources Workgroup
SCS001 – Electric Generating Peaking Units

Background

In response to modeled future non-attainment of the eight-hour National Ambient Air Quality Standard (NAAQS) for ozone, the New Jersey Department of Environmental Protection - Division of Air Permitting (NJDEP) is considering proposing major changes to NO_x emission requirements. One of these strategies specifically addresses electric generating unit (EGU) peaking capacity. The EGU peaking capacity proposed control measures are consistent with the Candidate Control Measures discussed by the Ozone Transport Commission (OTC) Control Strategy Workgroup. Reliant Energy is gravely concerned about the costs of the installation of these control measures and importantly, the impact these costs will have on the continued commercial viability of the generating units. Importantly, due to the PJM cost structure and the infrequent operation of these units, it is virtually impossible to recover the costs associated with these candidate control measures. Consequently, it may be necessary to retire some of these peaking units rather than implement the specified candidate control measures. The inability to recover costs also affects the decision of an electric wholesale generator relative to making the considerable investment necessary to site and install new peaking generating capacity.

The candidate control measures recommendation provides for the revision of Subchapter 19 emission limits for simple cycle turbines including,

Candidate Measure 1: Install water injection technology (short term)

Candidate measure 2: Replace all existing aeroderivative turbines with newer Dry-Lo NO_x (DLN) based simple cycle turbines

As has been discussed in various OTC meetings, while achievement of the ozone NAAQS is critical, electrical system reliability is also equally critical. Due to the costs associated with the candidate control measures and the inability to recover the costs, these measures could in fact jeopardize electrical system reliability. Further, the measures would accomplish the exact opposite of desired effects relative to ozone attainment as it specifies very expensive control measures which would result in the most costly, and likely the most highly controlled units, being the last units in the dispatch order. That is exactly opposite the goal stated by Chris Recchia, Executive Director OTC, in meetings where this subject was discussed. In those meetings, Mr. Recchia stated the goal of the OTC is to have the lowest emitting units coming on line first during the high temperature peak demand days.

Reliant Energy New Jersey Holding, LLC owns and operates 21 simple cycle combustion turbines and one “4 on 1” combined cycle unit in the State of New Jersey with a total output of 1134 megawatts. These units, which are located in northern New Jersey, are fueled by either pipeline natural gas and/or No. 2 fuel oil, and are considered “peaking units”. These units

operate only a small number of hours each year as reflected in their net capacity factors listed below:

Net Capacity Factor (%)					
Station	2005	2004	2003	2002	2001
Gilbert	2.84	1.23	4.16	4.36	3.08
Glen Gardner	0.47	0.25	0.33	1.11	0.39
Sayreville	0.38	1.99	0.75	0.75	0.66
Werner	0.35	1.78	0.30	0.29	0.47
Combined Weighted Average	1.52	1.35	2.18	2.38	1.70

Recommendations

Reliant Energy believes there is a very simple mechanism to achieve cost effective emission reductions; achieve the NOx emission reductions necessary to achieve and maintain the ozone NAAQS; achieve the OTC stated goal of lower emitting units being brought into service first; and preserve the flexibility and value of the market-based regulations. Reliant Energy believes that the Department can accomplish all of those goals by providing for the use of NOx allowances allocated under the Clean Air Interstate Rule (CAIR) to satisfy the emission reduction goals of the EGU peaking capacity.

NJDEP estimates that out of 120 peaking units in the state, 80 units have no NOx control. For those uncontrolled units, a more effective way to meet NJDEP's goals would be through NOx Budget allowance surrender to account for NOx emissions from these units. In the case of this peaking capacity which is located in New Jersey, "inner-zone corridor capacity", this concept can be used to recognize and reward sources that have installed and operate NOx reduction control technologies in accordance with 7:27 – Subchapter 19 Reasonably Available Control Technology (RACT) requirements which are consistent with Candidate Control Measure 1. Specifically, EGU peaking capacity which has installed and operates these NOx emission control technologies, for example those that were licensed, installed, tested, and approved by the New Jersey Department of Environmental Protection, would be required to also submit CAIR ozone season NOx allowances at a ratio of 1:1 as is required in the CAIR regulations. However, those EGU peaking capacity units that are located in the OTR "inner-corridor" and have not specifically installed technologies consistent with NOx RACT-type emission control technologies would be required to surrender CAIR ozone season NOx allowances to the state environmental regulatory agency, in this case the New Jersey Department of Environmental Protection, at a ratio of 2:1. Additionally, those CAIR ozone season NOx allowances must be of the same vintage as the ozone season in which the emissions occurred. This allows those types of units to decide whether the installation of emission control or the significant over-surrender of NOx allowances provides them with the best opportunity to provide valuable stability to the electrical system grid. Further, as the ozone NAAQS must also consider the appropriate regional

control as part of the attainment and maintenance strategy, this proposal is consistent with those measures. Importantly, this proposal can, without question, be mandated by each “inner-corridor” state as the CAIR program for NO_x is implemented as a state program and the states can control allocation and surrender requirements. The requirement to surrender these CAIR ozone season NO_x allowances to account for NO_x emissions must be required even if the EGU peaking capacity are not CAIR affected units.

We would be happy to meet with NJDEP to discuss these concepts in further detail.